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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,650	01/13/2005	Rinaldo Husler	II/2-22717/A/PTCT	9350
324	7590	09/21/2009		
JoAnn Villamizar Ciba Corporation/Patent Department 540 White Plains Road P.O. Box 2005 Tarrytown, NY 10591			EXAMINER MCCLENDON, SANZA L.	
			ART UNIT	PAPER NUMBER
			1796	
			NOTIFICATION DATE	DELIVERY MODE
			09/21/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/521,650

Applicant(s)

HUSLER

Examiner

Sanza L. McClendon

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 5,9-11 and 15-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15 and 17-19 is/are allowed.
- 6) ☒ Claim(s) 5,9-11, 16 and 20 is/are rejected.
- 7) ☒ Claim(s) 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/09.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application.
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. In response to the Amendment received on May 15, 2009, the examiner has carefully considered the amendments. The examiner acknowledges the cancellation of claims 12-14, as well as, the addition of new claims 16-21. The rejection of claim 11 under 35 USC 112, 2nd paragraph has been withdrawn in view of applicant's amendment.

Response to Arguments

2. Applicant's arguments filed May 15, 2009 have been fully considered but they are not persuasive. Applicant appears to be relying on the cure rate of at least 100 meters/minute to overcome the rejection and the unexpected "cure efficiency" results shown in the specification. Applicant has not argued the merits of the rejection except to say that Gaske, while teaching the addition of aminoacrylates will improve cure rates, fails to set forth the photoinitiators of the instant invention. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Instead applicant appears to be arguing unexpected "cure efficiency" results of the claimed photoinitiators when compared to photoinitiators such as Darocur 1173 or Irgacure 184. While it does appear the photoinitiators of the instant claims have better cure efficiency in the presence of an aminoacrylate, the prior art used to reject the instant claims does not use photoinitiators, such as Darocur 1173 or Irgacure 184, but instead teaches photoinitiators that are analogous to those found in the instant claims, as well as, the photoinitiators of instantly claimed formulas (II) and (III) specifically—see column 8, lines 8-9 and column 19, photoinitiator 21. The issue is whether one of ordinary skill in the art would have found it obvious to use the aminoacrylates as taught by Gaske into the compositions as taught by Felder et al. The examiner deems that it would have been obvious, as suggested in the pending rejections. Additionally, the examiner argues that Felder et al does teach the addition of an aminoacrylate with the photosensitizer in the description. Felder et al sets forth the disclosed photoinitiators can be used in printing ink compositions, which require high production speeds and photo hardening should take place on the order of fractions of seconds. Felder discloses printing ink compositions comprising a binder, an acrylamide and a photosensitizer, wherein the photosensitizers

can be those disclosed by Felder et al and wherein acrylamide is an amino-functional acrylate monomer—see column 13, lines 6-14. Additionally, Felder et al discloses the disclosed photoinitiators can be used in combination with amines and/or aromatic ketones—see column 12, lines 64-65. Furthermore, Felder et al discloses the photoinitiators are improved in that they initiate the photopolymerization more rapidly and provide higher polymer yield per unit of time than known photosensitizers—see column 1, lines 45-50. Regarding applicant's limitation "cure rate of at least 100 m/min". Felder et al shows curing in nitrogen with analogously disclosed photoinitiators having cure rates of at least 100 m/min—see table 5. Therefore the examiner deems that one of ordinary skill in the art, at the time of the invention, using Felder et al and Gaske et al would have expected to see full cures at curing rates of at least 100 m/min in at least a nitrogen atmosphere.

3. Additionally, applicant states that structure (V) in claim 15 is not specifically disclosed by Felder et al. The examiner agrees and therefore claims 15, and 17-19 will be withdrawn from the rejection.

4. Additionally, the examiner agrees with applicant's arguments regarding the obviousness-type double patenting rejection. Therefore this rejection has been withdrawn.

5. Regarding new claims 16, 20, and 21: Felder et al sets forth the photosensitizers can be used in amounts from 0.1 to 20 weight percent in a photo hardening composition—see column 13, lines 34-36. This amount is deemed to encompass applicant's claimed "at least 10% by weight" in claim 16. Felder et al sets forth said sensitizers can be used in applications such as colourless varnish coatings—see column 13, lines 19-26. Thus claim 20 is read in the reference. Regarding claim 21, neither Felder et al nor Gaske et al set forth that said cure rate is affected at a lamp output of at least 120 W/cm.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said

subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 5 and 9-11, 16, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Felder et al (US 4,308,400) in view of Gaske (US 3,844,916).

Regarding claim 5, Felder et al teach a composition comprising the photosensitizer of claimed formula III (C8/L8-9, see 4,4'-bis-(α -hydroxy-isobutryl)-diphenyl ethane) and formula (II) (see col. 19, line 21), an ethylenically unsaturated compound (C11/L33, ethylene diacrylate C11/L39), fillers (C12/L58-61) and further photoinitiators (C12/L62-68). While the reference teaches the composition comprising an ethylenically unsaturated compound, even an acrylate, (C11/L33, ethylene diacrylate C11/L39), it does not specifically teach an aminoacrylate as the, ethylenically unsaturated compound.

Gaske discloses a radiation curable coating composition (C1/L4-5) containing a photoinitiator (C1/L32-33, see photosensitizer) and an ethylenically unsaturated compound being an aminoacrylate (C1/L17-42). Furthermore the reference discloses the composition to cure rapidly with minimum ultraviolet light and producing minimum fumes and vapors (C1/L8-11). The reference additionally discloses that the radiation polymerization is extended and speeded, as well as, scavenging oxygen preventing air inhibition of the coating composition by the presence of the tertiary amine of the aminoacrylate compound (C1/L34-42). Gaske and Felder et al teach analogous inventions related to radiation curable coatings comprising a photoinitiator and an ethylenically unsaturated compound. Applicant is reminded the courts have upheld that it is obvious to add a known ingredient to a composition for its known property—see *In re Linder* 173 USPQ 356. It would have been obvious to one of ordinary skill in the art at the time of the invention to use an aminoacrylate as the ethylenically unsaturated compound of the composition of Felder et al to increase the extent and speed of the

polymerization of the composition, as well as, preventing air inhibition when exposed to UV light in the absence of evidence to the contrary and/or unexpected results.

Regarding claims 9 and 11, Felder et al teach applying the composition to a surface and curing the composition with UV light (see Example 4).

Regarding claim 16: Felder et al sets forth the photosensitizers can be used in amounts from 0.1 to 20 weight percent in a photo-hardening composition—see column 13, lines 34-36. This amount is deemed to encompass applicant's claimed "at least 10% by weight" in claim 16.

Regarding claim 20 Felder et al teach the composition as a pigmented or unpigmented surface coating (C13/L19-27; varnish coating of metal sheeting, colorless varnish coating of paper).

Allowable Subject Matter

8. Claim 21 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 15 and 17-19 are allowed.

10. The following is an examiner's statement of reasons for allowance: The prior art, alone or in combination, fails to set forth a composition comprising an ethylenically unsaturated compound containing an aminoacrylate with a photoinitiator having the formula (V).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the

mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L. McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Scidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sanza L. McClendon/
Primary Examiner, Art
Unit 1796

SMc